

level to examine this problem and opportunity. These agencies expect to take about one year to analyze the situation and make a report. Interior has the leadership responsibility. However, SCS will chair an interagency study group which will be located in Denver, Colorado, and do the field work.

This interest at the Federal level has stimulated a similar interest among several of the Western States. Active state participation is essential if any program of this type is to be fully effective and long-lasting. Only in this way can the objectives of this Act be fully realized.

#### Interagency Study on Irrigation Efficiencies

In accordance with General Accounting Office recommendations, an Interagency Task Force on Irrigation Efficiencies has been established at the Washington level. The Task Force membership consists of:

Eugene Hinds, U. S. Department of the Interior - Chairman.

Joseph W. Haas, U. S. Department of Agriculture.

Joseph A. Krivak, U. S. Environmental Protection Agency. (452)

The objective of the Interagency Task Force is to examine the problem of inefficient irrigation in the United States and develop recommendations regarding appropriate Federal objectives, policies, agency roles, and action programs. The Task Force's study will include: requirements for increasing irrigation efficiencies, the costs, economic benefits, water conservation, effects on water quality, and environmental and social impacts. The study will involve both Federal and non-Federal irrigation development. (453)

The Task Force established a Technical Work Group to make investigations, evaluations, and recommendations on ways to improve irrigation efficiencies. The Technical Work Group operates out of the Engineering and Research Center, Bureau of Reclamation, Denver, Colorado. Sheldon G. Brown, SCS, has been designated as Chairman of the Technical Work Group.

irrigation water delivery systems.

3. Make realistic appraisals of the feasibility of substantially increasing Western irrigation efficiencies within 5 years and the attainable measure of improvement.

4. Determine the costs, associated water savings, water quality and fish and wildlife impacts and associated mitigation measures required, and social and economic effects of irrigation efficiency improvements.

5. Determine the potential disposition of the water saved and the benefits and environmental impacts associated therewith.

6. Review the current objectives, policies, and ongoing action programs of Federal agencies and other organizations as directly or indirectly concerned with increasing irrigation efficiencies.

7. Identify adjustments needed in Federal objectives and policies and specific actions which should be taken to increase water use efficiencies, achieve water conservation, enhance water quality, and achieve environmental goals.

8. Orient the study to document conclusions and recommendations, keeping the recommendations of the General Accounting Office's reports of June 22, 1977, and September 2, 1977, firmly in mind.

9. The investigations should emphasize agricultural water use in the Western States.

10. Prepare a draft report from the Interagency Task Force to the Secretaries of Agriculture and the Interior and the Administrator of the Environmental Protection Agency presenting the study's findings, conclusions, and recommendations.

11. Prepare the final report from the Interagency Task Force. This report is due September 1, 1978. (456)

#### Rural Clean Water Program

The Rural Clean Water Program was authorized by Sec. 35, P.L. 95-217 (91 Stat. 1579), December 27, 1977. This legislation amends Section 208, P.L. 92-500, the Federal Water Pollution Control Act. Sec. 35 authorizes and directs the Secretary of Agriculture, with the concurrence of the Administrator, Environmental Protection Agency (EPA), and acting through the Soil Conservation Service and such other USDA agencies as the Secretary may designate, to establish and administer a program for the purpose of installing and maintaining measures incorporating best management practices to control nonpoint source pollution for improved water quality. The program will be carried out through contracts with the owners and

operators of rural land. These contracts, which provide for Federal cost-sharing, will have a duration of not less than five nor more than ten years.  
(457)

14. ASC county committees, in those counties selected for participation in the Rural Clean Water Program, will represent the Secretary of Agriculture in determining priority of assistance among individual land owners and operators, together with the local soil conservation district, based on technical information provided by SCS. (458)

A formal agreement on the program design for the Rural Clean Water Program was signed on April 25, 1978, by Assistant Secretary M. Rupert Cutler of USDA and Assistant Administrator Thomas C. Jorling of EPA. This agreement will serve as the basis for the development of National program regulations. Draft regulations are scheduled to be published around May 15, 1978, with a period for public review and comment before final publication prior to September 30, 1978. (459)



## CHAPTER 12

### S U M M A R Y

The Department of Agriculture was established on May 15, 1862. Its general design and duties were "to acquire and diffuse among the people of the United States useful information on subjects connected with agriculture . . . and to procure, propagate, and distribute among the people

resources has been appropriately expressed by D. A. Williams, former Administrator, SCS. He stated: "Water, like soil, is a basic resource of the nation's life and economy. And, like soil, its use and care are first in the hands of farmers, ranchers, and other land users." (460) USDA is the Federal Agency charged with the responsibility of assisting the people of the United States with subjects and problems connected with agriculture.

USDA's involvement in the field of water resources accelerated during the next half-century. Its activities in soil and water conservation and erosion control research expanded rapidly in the early 1930's. In April 1935, the Soil Conservation Service was established and all USDA erosion control activities were centered in that agency. After July 1, 1937, all its erosion control work was undertaken through legally constituted Soil Conservation Associations.

USDA was involved in the activities of four successive national planning organizations at the national level between 1933 and 1943. The Flood Control Act of 1936 directed the Secretary of Agriculture to make Federal investigations of watersheds and measures for run-off and water flow retardation on the watersheds of the nation. An amendment to this Act in 1937 extended this authority to cover all watersheds authorized to be surveyed by the Corps of Engineers. This included all the "308" watersheds. As of January 1, 1946, USDA had authorizations to make preliminary examinations on 913 watersheds. During the period 1937-1943 it initiated studies on 212 watersheds and completed 160. Eleven of these were authorized for construction by the Flood Control Act of 1944.

USDA prepared an Agricultural Plan for development of the Missouri River Basin to supplement and complement the Pick-Sloan Plan of the Corps and the Bureau of Reclamation. It was not authorized for construction but influenced subsequent watershed planning efforts. Other USDA water programs of the late 1930's and early 1940's were the Water Facilities Program, the Land Utilization and Retirement of Submarginal Land Program and the Case-Wheeler Program.

The 1953 House Agricultural Appropriations Bill included \$5 million for a pilot watershed program. This was authorized and 62 watersheds were designated by December 8, 1953. Planned works of improvement were installed on 54 of these by 1972.

The Flood Prevention Watersheds authorized by the Flood Control Act of 1944 and the Pilot Watersheds Program were the forerunners of the Watershed Protection and Flood Prevention Program authorized by P.L. 83-566. This has been a very popular program because it is locally initiated, locally controlled, and reflects the objectives and desires of the local people. As of April 1, 1977, 2,860 applications for assistance had been received, and 1,752 watersheds approved for planning, 1,185 plans authorized for operations and 434 projects had been completed.

This program has encountered a number of problems which have delayed installation and slowed down the rate of planning during the last 10 years: (1) The Administration placed a moratorium on the processing

of Watershed Work Plans in 1966. This was not lifted until April 1, 1969, by the new Administration. About 96 watershed projects were held in abeyance during this period. (2) The National Environmental Policy Act was passed in 1969. It required environmental impact statements to be prepared for each project. At the time the Act was passed, SCS had 621 watershed projects in operation. Since the Act was ruled to be retroactive, each of these had to be brought into compliance. This required much of the available planning resources. (3) The Uniform Relocation Assistance and Real Property Policies Act also required additional planning inputs into projects already in operation. (4) New emphasis on the protection of archeological and historical properties added a new dimension and additional time requirements to the planning process. (5) The Water Resource Council issued its Principles and Standards in 1973. These replaced the planning and evaluation procedure established by Senate Document 97 and required a multiple-objective planning approach with equal emphasis on national economic development and environmental quality. This not only increased investigation and evaluation time in order to service its four accounts, but also made plan formulation more difficult because of involvement of added interests.

The impact of these changes and added requirements to the planning process are: planning is a more involved and longer process than formerly; a wider range of interests is involved; and the decisions and desires of the watershed sponsors and residents no longer are over riding. This has changed the watershed program from a local program with Federal assistance to one which approaches a Federal program with local assistance and obligations. The result has been some loss of popularity of the program with the agricultural interests of the watersheds.

The watersheds operations program has moved forward about as fast as available funding would permit. During the 20-year period, 1956-1976, USDA obligated over \$1,221 million on 1,185 projects, 434 of which have been completed.

Through fiscal year 1977, USDA had completed 59 Type 4 cooperative River Basin Studies and had 50 under way. It had participated in 12 Type 1 Interagency Studies, 16 Type 2 studies and 15 Level B studies, 12 of which are still underway.

SCS also makes Flood Hazard Analyses and Flood Insurance Studies. Its field delivery system is especially important to these study efforts. It has an active recreation program which cuts across all SCS programs, and it carries out emergency watershed protection activities following major natural disasters.

has been with the Water Resources Council established by the Water Resources Planning Act of 1965. USDA is an active member of the Council of Members and its alternates, the Council of Representatives, all committees, and the River Basin Commissions. It participates on various task forces including those for the National Assessment, the Principles and Standards, and the Section 80(c) Study.

Because of its field delivery system and its close tie with the farmer, USDA is participating with Interior and EPA in the Colorado River Basin Salinity Control Program. USDA's primary involvement is with the on-farm application of needed corrective measures to improve irrigation efficiencies.

In accordance with recommendations of the GAO, an Interagency Task Force on Irrigation Efficiencies has been established at the Washington level. It is composed of representatives of the USDI, USDA, and EPA. Its objective is to examine the problem of inefficient irrigation in the U.S. and develop recommendations regarding appropriate Federal objectives, policies, agency roles, and action programs.

The Task Force established a Technical Work Group to make investigations, evaluations and recommendations on ways to improve irrigation efficiencies. It operates out of Denver, Colorado, and is chaired by SCS.

The overall objective of this total effort is water conservation through improved irrigation efficiencies.

The Rural Clean Water Program was authorized by Sec. 35, P.L. 95-217, December 27, 1977. This legislation amends Section 208, P.L. 92-500, the Federal Water Pollution Control Act. The Secretary of Agriculture is authorized and directed to establish and administer a program for the purpose of installing and maintaining measures incorporating best management practices on rural lands to control nonpoint source pollution for improved water quality. The program will be carried out through contracts with the owners and operators of rural lands. These contracts, which provide for Federal cost-sharing, will have a duration of not less than five nor more than ten years.

The SCS has been given program leadership. The ASCS will provide guidance to State and county ASC Committees, coordinate the ACP with the Rural Clean Water Program, and consolidate the annual cost-share disbursements made by State and local agencies as well as those disbursed by the State ASC Committee.

Other USDA agencies, such as Extension, FS, FmHA, ERS and ARS, will provide appropriate support.

SCS will develop rules and procedures; manage budgeting, accounting, and reporting; and provide technical support leadership to states, evaluate program operations, and approve agreements.



The EPA will approve 208 plans and provide concurrence in USDA rules, regulations, and project proposals.

Final publication of the national program regulations are expected prior to September 30, 1978.

As the Water Resource Programs of the nation have developed, USDA has had to be directly involved. It is the Federal agency most closely associated with the farmers, ranchers, and private timber growers who control most of the privately owned lands of the nation. These non-Federal rural lands, together with the National Forests, constitute

## REFERENCES

1. Moore, Ernest G., The Agricultural Research Service, Frederick A. Praeger, Publishers, 111 Fourth Avenue, New York, N.Y., 10003, 1967, p. 6.
2. Ibid., pp. 3-4
3. USDA Document, "Condensed History of the U.S. Department of Agriculture", USDA Office of Information, No. 4 Revised, October 1, 1949, pp. 3-4.
4. Historical Files of ARS, "Authority for Research on Soil and Water Conservation Problems in ARS, United States Department of Agriculture", p. 1.
5. Rasmussen, Wayne D., and Baker, Gladys L., The Department of Agriculture, Praeger Publishers, 111 Fourth Avenue, New York, N.Y., 10003, 1972, p. 6.
6. USDA, After a Hundred Years, The Yearbook of Agriculture, 1962, United States Government Printing Office, Washington, D.C., p. 7.
7. Ibid., p. 9.
8. Ibid.
9. Historical Files of ARS or cit p. 2



32. Geiger, op. cit., p. 5.
33. Ibid., p. 12.
34. SCS Records and Reports Division.
35. Holmes, op. cit., p. 14.
36. Ibid.
37. Ibid.
38. Ibid.
39. SCS Historical Files, Minutes of the first meeting of the Water Resources Committee, July, 1935.
40. Ibid.
41. SCS Historical Files.
42. Ibid.
43. Holmes, op. cit., pp. 14-15.
44. Ibid., p. 15.
45. SCS Historical Files.
46. Ibid.
47. Ibid.
48. Geiger, op. cit., p. 4.
49. Ibid., p. 5.
50. Holmes, op. cit., p. 17.
51. SCS Historical Files, "Flood Control Surveys" folder, Letter, June 14, 1944, from C. P. Barnes, Associate Land Use Coordinator to Elmer A.

71. Ibid., pp. 19-20.

72. Holmes, op. cit., p. 17.

73. ~~pp. 55-56~~ ~~Donner~~ "Authorization and Development of the Soil Conservation



112. Ibid.
113. Morgan, Robert J., "The Small Watershed Program", in Law and Contemporary Problems, 22(3): Summer, 1957, pp. 411-412.
114. Holmes, op. cit., p. 28.
115. Ibid.
116. SCS Draft Manuscript, "Compilation of the Statutory Authorities Relating to the Programs and Activities of the Soil Conservation Service", Part 1, p. 6.
117. SCS Staff Paper, SCS-CA-10, op. cit., p. 7.
118. Holmes, op. cit., p. 28.
119. SCS Draft Manuscript, op. cit., pp. 6-7.
120. P.L. 83-566, (68 Stat. 666), as amended, Secs. 2 and 5.
121. Ibid., Sec. 2.
122. Ibid., Sec. 12.
123. Ibid., Sec. 4.
124. Ibid., Sec. 7.
125. Ibid., Sec. 4.
126. Ibid., Sec. 2.
127. Ibid., Sec. 4.
128. Ibid., Sec. 2.
129. Ibid., Sec. 5.
130. Ibid., Sec. 4-5.
131. Buie, Eugene C., Carmichael, Ernest F., McLean, John E., Roehl, John W., "Interdisciplinary Teamwork in Watershed Planning", Economics of Watershed Planning, edited by G. S. Tolley and R. E. Riggs, Iowa State University Press, Ames, Iowa, 1961, p. 91.
132. Ibid., p. 87.
133. USDA, "National Inventory of Soil and Water Conservation Needs, 1967", USDA Statistical Bulletin No. 461, U.S. Government Printing Office, Washington, D.C., p. 202.
134. Holmes, op. cit., p. 29.
135. Williams, Hollis R., "The First Ten Years of Progress in Developing the Nations Watersheds", Address delivered at Eleventh National Watershed Congress, Little Rock, Arkansas, April 27, 1964.
136. SCS Staff Paper, "Possible Items for Discussion with House Agriculture Sub-Committee on Conservation and Credit", February 10, 1975.
137. SCS Staff Paper, "Background on Controversy Re: Approval of P.L. 566 Projects", March 20, 1968, p. 2.
138. Ibid.
139. USDA News Release, "President Resolves White House-Congress Impasse Over Small Watersheds", Washington, D.C., April 1, 1969.
140. Andrews, Richard N. L., "Agency Responses to NEPA: A Comparison and Implications", Natural Resources Journal, Vol. 16, p. 301.

147. Grant, Kenneth E., "Environmental Responsibilities and Opportunities in the Watershed Program", Speech delivered at the 19th National Watershed Congress, San Diego, California, June 6, 1972, pp. 2-3.
148. Ibid., p. 3.
149. Ibid.
150. SCS, National Summary of Stream Channelization, December 30, 1976.
151. Natural Resources Defense Council, Inc., News Letter, Vol. 1, Issue 2, Summer 1971.
152. Ibid.
153. Natural Resources Defense Council, Inc., "To Save Our Streams", Action Packet II, undated.
154. North, R. M., Johnson, A. S., Hillestad, H. O., Maxwell, P. A. R., Parker, R. C., "Survey of Economic-Ecologic Impacts of Small Watershed Development", Technical Completion Report, USDI/OWRR Project No. B-059-Ga., July 1971-June 1974, p. 118.
155. Ibid., pp. 104-105.
156. Barlow, Tom, Letter on NRDC stationery to L. P. Voigt, Secretary, Department of Natural Resources, Madison, Wisconsin, October 3, 1972.
157. Grant, op. cit., p. 4.
158. Wilkinson, John M., "Inventories and Research: Baselines for Environmental Action", Paper presented at 20th National Watershed Congress, Wichita, Kansas, June 5, 1973, pp. 5-9.
159. Andrews, op. cit., p. 309.
160. ~~Whitcomb, David, CDD, Administration, Commission, Principles of Environmental~~

177. SCS, "Conservation Highlights", Summary of Activities of the Soil Conservation Service for Fiscal Year 1976, January 1977.
178. USDA Work Group-Safety of Dams, "Review of Practices for Safety of Dams", August 1977, p. 6.
179. ARS Historical Files, op. cit., pp. 3-4.
180. USDA Yearbook, 1926, Ramser, C. E., "Drainage Ditch Clearing", pp. 309-312.
181. SCS Staff Paper, "History of Land Drainage Activities of the Soil Conservation Service".
182. SCS National Engineering Handbook, Section 16, Drainage of Agricultural Land, Chapter 5.
183. USDA National Inventory of Soil and Water Conservation Needs, op. cit., Table 3b.
184. SCS, Conservation Highlights, 1976, op. cit.
185. SCS, National Summary of Stream Channelization, op. cit.
186. USDA, National Inventory of Soil and Water Conservation Needs, op. cit., p. 202.
187. USDA, SCS, Status of Watershed Protection (P.L. 566) Program, op. cit., p. 94.
188. SCS Staff Paper, SCS-CA-10, op. cit., p. 6.
189. SCS, River Basin Memorandum No. 2, (Rev. 1), dated May 6, 1968.
190. Buie, Eugene C., "River Basin Surveys", Soil Conservation, December 1966, Vol. 32, No. 5, SCS, p. 102.
191. Ibid., pp. 103-104.
192. Ibid., p. 104.



214. Ibid., p. 1.



- 256. Ibid., p. 36.
- 257. Ibid., p. 37.
- 258. Davey, William B., Letter to E. Franklin Warner, Agricultural Branch,  
Office of Management and Budget, February 4, 1974.
- 259. Ibid.
- 260. Ibid.
- 261. SCS-HUD Instructions.
- 262. Ibid.
- 263. SCS River Basins Division, Flood Plain Management and Special Projects  
Branch, Status Report, "Reimbursable HUD Flood Insurance Studies Car-  
ried Out by SCS as of September 30, 1977."
- 264. Ibid.
- 265. Leisher, Draft Staff Paper, op. cit. p. 1.
- 266. HUD, FIA, "Communities Participating in the National Flood Insurance  
Program", as of June 30, 1977, Summary.
- 267. USDA, SCS, "Recreation in Small Watershed Projects", PA 610, February  
1964.



- 288. SCS, Watershed Memo. - 124, op. cit., pp. 3-4.
- 289. USDA, op. cit., pp. Exhibit A, 1-3.
- 290. USDA, Secretary's Memorandum No. 1320 Supplement 4 November 2, 1953

- 333. Ibid.
- 334. Ibid.
- 335. SCS, Conservation Highlights, op. cit.
- 336. SCS, "An Evaluation of the Snow Survey and Water Supply Forecasting Program", Program Evaluation Division, February 1977, pp. 1-2.
- 337. Ibid., pp. 2-3.
- 338. Ibid., pp. 3-4.
- 339. Ibid., p. 4.
- 340. Ibid., pp. 4-6.
- 341. SCS, "The Soil Conservation Service Snow Survey and Water Supply Forecast Program", WRTSC, Portland, Oregon, April 1973, pp. 12-16.
- 342. SCS, Program Evaluation Division, op. cit., p. v.
- 343. Holmes, Misc. Publication, 1233, op. cit., p. 37.
- 344. Ibid., p. 38.
- 345. Liebman, op. cit., pp. 26-27.
- 346. Ibid., p. 27.
- 347. Ibid., pp. 27-28.
- 348. Holmes, op. cit., p. 40.
- 349. Ibid., p. 41.
- 350. Ibid.
- 351. Ibid.
- 352. Liebman, op. cit., pp. 32-33.
- 353. Holmes, op. cit., p. 41.
- 354. Liebman, op. cit., p. 33.
- 355. Holmes, op. cit., p. 41.
- 356. Ibid., pp. 41-42.
- 357. Commission on Organization of the Executive Branch of the Government, Task Force Report on Water Resources and Power, Volume 1, June 1955, p. 1.
- 358. Ibid., p. 65.
- 359. Ibid., p. 101.
- 360. Holmes, op. cit., p. 42.
- 361. The Presidential Advisory Committee on Water Resources Policy, "Water Resources Policy", December 22, 1955, p. xi.
- 362. Ibid.
- 363. Ibid., p. xii.
- 364. Holmes, op. cit., pp. 42-43.
- 365. Liebman, op. cit., pp. 36-37.
- 366. Ibid., p. 37.
- 367. Holmes, op. cit., p. 39.
- 368. Ibid.
- 369. Bureau of the Budget, Letter of Transmittal of Circular A-47, p. 1.
- 370. Bureau of the Budget, Circular No. A-47, December 31, 1952, pp. 1-2.
- 371. Ibid., pp. 7-9.
- 372. Ibid., pp. 9-10.
- 373. Ibid., p. 10.
- 374. Ibid., p. 6.
- 375. Holmes, op. cit., p. 38.
- 376. FIARBC, "Proposed Practices for Economic Analysis of River Basin Projects", Report Prepared by the Subcommittee on Benefits and Costs, May 1950, pp. vii-ix.

377. Liebman, op. cit., p. 29.
378. FIARBC, "Proposed Practices for Economic Analysis of River Basin Projects", Report prepared by the Subcommittee on Evaluation Standards, May 27, 1958, pp. 3, 7.
379. Ibid., p. ix.
380. USA, Thematic Papers for the United Nations Water Conference, Mar del Plata, Argentina, March 14-25, 1977, Water USA: 1779-1976, Par. 42, p. 11.
381. Ibid., Par. 43, p. 11.
382. P.L. 89-80, The Water Resources Planning Act, July 22, 1965, Sec. 101.
383. Liebman, op. cit., pp. 49-50.
384. Liebman, Ernst, op. cit.
385. Liebman, op. cit., p. 50.
386. Ibid., p. 51.
387. Ibid., pp. 55-57.
388. Ibid., p. 58.
389. Ibid., p. 59.
390. WRC, Publication List, June 1977.
391. P.L. 89-80, op. cit., Sec. 201.
392. Ibid., Sec. 204.
393. Liebman, op. cit., p. 70.
394. Ibid., p. 74.
395. Ibid., pp. 75-76.
396. SCS, "Crop Consumptive Irrigation Requirements and Irrigation Efficiency Coefficients of the United States", Special Projects Division, 1977, Foreword.
397. SCS, "Erosion, Sediment and Related Salt Problems and Treatment Opportunities", Special Projects Division, December 1975, Foreword.
398. SCS, "Domestic Water Use from Non-Central Systems", Special Projects Division, July 1975, pp. 1, 3.
399. SCS, "Livestock Water Use", Special Projects Division, July 1975, pp. 1, 3.
400. SCS, "National Water Assessment", Advisory RB-14, May 27, 1976, Attachment, p. 2.
401. Ibid.
402. Ibid.
403. WRC, "Guideline 3, OBERS E' Baseline Projections Agencies and Individuals", June 1975, pp. 1-2.
404. WRC, "1972 OBERS Projections, Series E", June 1975, p. 1.
405. Liebman, op. cit., pp. 81-82.
406. Ibid., pp. 82-83.
407. Ibid., p. 83.
408. Ibid.
409. Ibid., pp. 91-94.
410. Buie, Eugene C., "The Impact of the Principles and Standards on Water Resource Planning", op. cit., pp. 1-2.
411. Ibid., p. 2.
412. Department of the Army, Corps of Engineers, "Water Spectrum", Volume 5, No. 4, 1973, Reprint by WRC, January 1974, pp. 22-23.
413. Buie, op. cit., p. 2.
414. Ibid., p. 3.
415. Ibid., p. 4.



416. Ibid.

417. SCS, Watersheds Memorandum - 92(Rev. 5), September 10, 1975.

418. Buie, op. cit., p. 5.

419. Ibid., pp. 6-8.

420. NPS, "Agricultural Drainage Standards and Guidelines," 1976.



- 452. Haas, Joseph W., Letter to Paul K. Koluvek and E. Gordon Kruse, September 9, 1977.
- 453. Interagency Task Force on Irrigation Efficiencies, General Work Plan, September 1977.
- 454. Haas, op. cit.
- 455. Interagency Task Force, op. cit.
- 456. Ibid.
- 457. P.L. 95-217 (91 Stat. 1579), December 27, 1977, Sec. 35.
- 458. Cutler, M. Rupert, Assistant Secretary of Agriculture, Letter to Bob Bergland, Secretary of Agriculture, February 3, 1978.
- 459. National Association of Conservation Districts, Tuesday Letter, May 2, 1978.
- 460. Williams, Donald A., "Our Fresh Water Supply - Nations Newest Critical Resource", Reprint from 1958 Yearbook of United Fresh Fruit and Vegetable Association, 777 14th Street, N.W., Washington, D.C., February

## BIBLIOGRAPHY

### Books

Armstrong, Ellis L., Robinson, Michael C., Hoy, Suellen M., History of Public Works in the United States, 1776-1976, American Public Works Association, 1313 East 60th Street, Chicago, Ill., 60637.

Moore, Ernest G., The Agricultural Research Service, Frederick A. Praeger, Publishers, 111 Fourth Avenue, New York, N. Y., 10003, 1967.

Rasmussen, Wayne D., Century of Service - the First 100 Years of the USDA



Corps of Engineers, "Potomac River Basin Report", Vol. 1.

FIARBC, "Proposed Practices for Economic Analysis of River Basin Projects",  
Report Prepared by the Subcommittee on Benefits and Costs May, 1950



ASCS, Compilation of Status of Agreements, Water Bank Program, July 1977.

Department of the Army, Corps of Engineers, Water Spectrum, Vol. 5, No. 4, 1973.

ERS, Classification and Organization Chart, August 3, 1970.

FmHA, Brief History of the Farmers Home Administration, January 1975.

FmHA, Total Obligations through Fiscal Year 1976 and Transition Quarter.

Forest Service, Forest Service Manual, Amendment No. 12, July 1968.

Geiger, Robert L., Jr., "A Chronological History of the Soil Conservation Service and Related Events", Soil Conservation Service, USDA, December 1955, SCS-CL-1.

Holmes, Beatrice Hort, "A History of Federal Water Resource Programs 1800-1960", USDA, Economic Research Service, Miscellaneous Publication No. 1233, Washington, D.C., 20250, June 1972.

Ramser, C. E., "Runoff from Small Agricultural Areas", Reprinted from Journal of Agricultural Research, Vol. 34, No. 9, Washington, D.C., May 1, 1927.

REA, REA Financed Generating Plants, January 1, 1977.

SCS, Agricultural Information Bulletin, No. 8, 1950.

SCS, An Evaluation of the Snow Survey and Water Supply Forecasting Program, Program Evaluation Division, February 1977.

SCS, Conservation Highlights, Summary of Activities of the Soil Conservation Service for Fiscal Year 1976, January 1977.

SCS, Crop Consumptive Irrigation Requirements and Irrigation Coefficients of the United States, Special Projects Division, 1977.

SCS, Domestic Water Use from Non-Central Systems, Special Projects Division, July 1975.

SCS, Eleven Authorized Flood Prevention Watersheds, SCS-CI-15, Revised, June, 1976.

SCS, Erosion, Sediment, and Related Salt Problems and Treatment Opportunities, Special Projects Division, December 1975.

SCS, For the Fun of It---and Then Some, Program Aid 1960, January 1974.

SCS, Livestock Water Use, Special Projects Division, July 1975.

SCS, National Engineering Handbook, Section 16, Drainage of Agricultural Land.

SCS, River Basins Memorandum No. 2, (Rev. 1), May 6, 1968.

U. S. Study Commission - Texas Report, Part 1.

WRC, Agricultural Price Standards, Guideline 2, October 1976.

WRC, Guideline 3, OBERS E' Baseline Projections, Agencies and Individuals,  
June, 1975.

WRC, 1972 OBERS Projections, Series E, June 1975.

WRC, Introduction, Part 1, Planning and Cost Sharing Policy Options for  
Water and Related Land Programs, November 1975.

WRC, National Conference on Water, April 22-24, 1975 Summary U.S. Govern-

Grant, Kenneth E., "Environmental Responsibilities and Opportunities in the Watershed Program", Speech delivered at the 19th National Watershed Congress, San Diego, California, June 6, 1972.

Hobaugh, William Carl, "Waterfowl Utilization Characteristics of Flood-water Retarding Structures in North Central Texas", a Thesis submitted to the Graduate College of Texas A & M University, College Station, Texas, December 1977.

Interagency Task Force on Irrigation Efficiencies, General Work Plan, September 1977.

Kopfler, W. F., II, USDA Forest Service, Washington, D.C., 20250, Welcoming Remarks, April 9, 1975.

Letter, Barlow, Tom, Natural Resources Defense Council, to Voigt, L. P., Secretary, Department of Natural Resources, Madison, Wisconsin, October 3, 1972.

Letter, Barnes, C. P., Associate Land Use Coordinator, USDA, to Starch, Elmer A., Bureau of Agricultural Economics, June 14, 1944, SCS Historical File, Flood Control Surveys Folder.

Letter, Bureau of the Budget, Transmittal of Circular A-47, December 31, 1942.

Letter, Cutler, M. Rupert, Asst. Secretary of Agriculture to Bob Bergland, Secretary of Agriculture, February 3, 1978.

Letter, Davey, William B., SCS, to Warner, E. Franklin, Agricultural Branch, Office of Management and Budget, February 4, 1974.

Letter, Haas, Joseph W., to Paul K. Koluvek and E. Gordon Kruse, September 9, 1977.

Letter, Hardin, Clifford M., Secretary of Agriculture, to Grant, Gordon M., Secretary, Federal Power Commission, March 3, 1970.

Letter, Phillips, George R., to Brannan, Charles F., Assistant Secretary of Agriculture, January 5, 1946, SCS Historical Files, Flood Control Surveys Folder.

NACD, Tuesday Letter, May 2, 1978.

Natural Resources Defense Council, Inc., News Letter, Vol. 1, Issue 2, Summer 1971.

Natural Resources Defense Council, Inc., "To Save Our Streams", Action Packet II, Undated.

SCS, Historical Files, Minutes of the first meeting of the Water Resources Committee, July 1935.



SCS, River Basins Division, "Status Report, Reimbursable HUD Flood Insurance Studies as of September 6, 1977", Flood Plain Management and Special Projects Branch.

SCS, River Basins Section, Status Report.

SCS, Staff Paper, "Background on Controversy Re: Approval of P.L. 566 Projects", March 20, 1968.

SCS, Staff Paper, "Flood Control".

SCS, Staff Paper, "Possible Items for Discussion with House Agricultural

- USDA, Secretary's Memorandum No. 799, December 3, 1938.
- USDA, Secretary's Memorandum No. 1320, Supplement 4, November 2, 1953.
- USDA, SCS, Predicting Rainfall-Erosion Losses from Cropland East of the Rocky Mountains, Agriculture Handbook 282, United States Government Printing Office, Washington, D.C.
- USDA, SCS, Resource Conservation and Development Projects, SCS-CI-14 (Rev. June 1972).
- USDA, SCS, Rules and Regulations, Part 656, Federal Register, Vol. 42, No. 137, Monday, July 18, 1977.
- USDA, SCS, Rules and Regulations, Part 650, Federal Register, Vol. 42, No. 152, Monday, August 8, 1977.
- U.S. Department of Housing and Urban Development, FIA, Communities Participating in the National Flood Insurance Program.
- U.S. Department of Housing and Urban Development, National Flood Insurance Program, HUD-1-54, January 1974.
- SCS, Staff Paper, "The Department of Agriculture and the Flood Control Program, 1937-1943".
- SCS, "Status of Preliminary Examinations and Surveys by the Department of Agriculture", July 20, 1953.
- USDA, News Release, "President Resolves White House-Congress Impasse over Small Watersheds", Washington, D.C., April 1, 1969.
- USDA-USDI, "Memorandum of Understanding between the Department of the Interior and the Department of Agriculture Relative to the Colorado River Basin Salinity Control Act."
- Wilkinson, John M., "Inventories and Research: Baselines for Environmental Action", Paper presented at 20th National Watershed Congress, Wichita, Kansas, June 5, 1973.
- Williams, Hollis R., "The First Ten Years of Progress in Developing the Nation's Watersheds", Address delivered at Eleventh National Watershed Congress, Little Rock, Arkansas, April 27, 1964.
- Young, Gladwin E., "Our Family's Indiana Heritage", January 1973.

#### Laws

- P.L. 74-46 (49 Stat. 163), Soil Conservation Act of 1935.
- P.L. 74-738 (49 Stat. 1570), The Flood Control Act of 1936.
- P.L. 75-210 (50 Stat. 525), Bankhead-Jones Tenant Act.

P.L. 78-534 (58 Stat. 887, 905), The Flood Control Act of 1944, December 22, 1944.

P.L. 81-516 (64 Stat. 163, 184), The Flood Control Act of 1950, May 17, 1950.

P.L. 83-156 (67 Stat. 205, 214), Agricultural Appropriation Act of 1954, July 28, 1953.

P.L. 83-566 (68 Stat. 666), The Watershed Protection and Flood Prevention Act, August 4, 1954, as amended.

P.L. 84-40 (69 Stat. 51), Agricultural Appropriation Act of 1956, May 23, 1955.

P.L. 84-1018 (70 Stat. 1058), August 7, 1956.

P.L. 85-624 (72 Stat. 507, 563), Fish and Wildlife Coordination Act, August 12, 1958.

P.L. 85-843 (72 Stat. 1058).

P.L. 85-850 (72 Stat. 1090), August 28, 1958.

P.L. 85-865 (72 Stat. 1605), September 2, 1958.

P.L. 86-468 (74 Stat. 131), April 13, 1960.

16 U.S.C., 528-531, The Multiple-Use-Sustained Yield Act, June 12, 1960.

P.L. 86-523 (74 Stat. 220), June 27, 1960.

P.L. 86-545 (74 Stat. 254), June 29, 1960.

P.L. 87-170 (75 Stat. 408), August 30, 1961.

P.L. 87-639 (76 Stat. 438), The Smith Act, September 5, 1962.

P.L. 87-703 (76 Stat. 615), Food and Agriculture Act of 1962, September 27, 1962.

P.L. 89-4, The Appalachian Regional Development Act of 1965, March 9, 1965.

P.L. 89-80 (79 Stat. 244), The Water Resources Planning Act, July 22, 1965.

P.L. 89-337 (79 Stat. 1300), November 8, 1965.

P.L. 89-665 (80 Stat. 915), National Historic Preservation Act.

P.L. 89-796 (80 Stat. 1478), November 8, 1966.

P.L. 90-361 (82 Stat. 250), June 27, 1968.

P.L. 90-448 (82 Stat. 587), The Housing and Urban Development Act of 1968, August 1, 1968.

P.L. 90-515, National Water Commission Act, September 26, 1968.

P.L. 90-537, The Colorado River Basin Project Act, September 30, 1968.

P.L. 90-542, Wild and Scenic Rivers Act, October 2, 1968.



P.L. 93-621 (amended P.L. 90-542), December 3, 1974.

P.L. 93-621 (amended P.L. 90-542), December 3, 1974.